FOR MYSORE STATE

Public Works (1955) Department.

Ms SERIES.

G.O. No. 3570

Dated 16.9.55

Passed

Superintendent

[Despatch Abstract.]

Communications - West coast Road Development Programme
Widening and upgrading miles 27/1 to 82/2 of Mangalore
Bantwal section in S. Kanara Dn - [Job No. 8c/MD/955]
Estimate for Rs. 59,700/- sanctioned.

"Highways Department"

From
Sri K.K.Nambiar, B.E., M.I.E.(Ind),
F.Inst.P.E.(Eng) M.Inst.E.(Eng),
M.Am.Soc.C.E.,
Chief Engineer (Highways),
Chepauk, Madras-5.

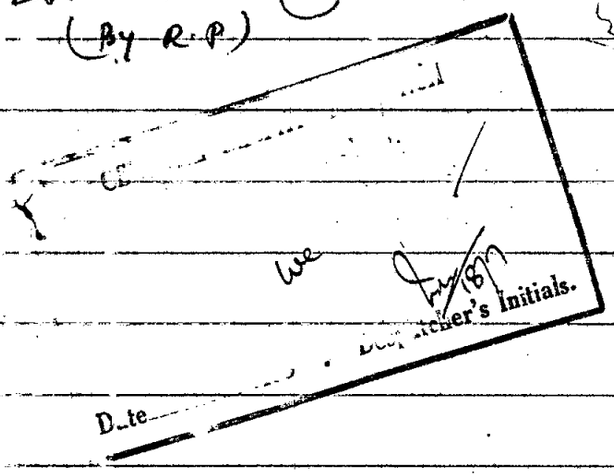
To
The Secretary to Govern
Public Works Department
Fort St.George,
Madras-9.

X-X-X-

D. A

Estimate at (A)

(By R.P.)



GO(D) No 2962 PW
24.1.54
(not printed)

(1)

GO(D) No 2962
24.1.54
(not printed)

1/1-2 (1)

Letter no 56394 A/55-2 dt 14-7-55

To

The secretary to the Govt of India,
Ministry of Transport (R.W),
Jamnagar House, Shahjehan Rd,
New Delhi

Sir,

Sub: West coast Road - Devt. Programme - Widening and upgrading Mangalore - Bainduer Coast Road from mile 77/1 to 82/2 - Estimate.

Ref: Shri Parulekar's Letter no WIV-3(15)53 dt 22-1-54.

I am directed to forward herewith an estimate for Rs. 68,700/- for the work of widening and upgrading Mangalore - Bainduer coast Road from mile 77/1 to 82/2 in S. Kanara Dn. This work has been included as item no 56 in the programme of works approved by the Govt. of India in their letter cited.

The necessity for the work, the provisions made in the estimate etc. are explained in the Specification report accompanying the estimate.

I am to request that

the technical approval and the financial sanction of the Govt. of India to the estimate may be obtained and communicated to this Govt at an early date.

CENTRAL DESPATCH BRANCH

M/ET's initials

9/7/55 M 11.7.55 Y. F.

Kew 9-7-55

copy to the CE (H) (with his letter No 11598 J2/55-4 dt 1.7.55.)

note :-

Please see the letter from the CE (H) on p. 1 of the draft above is submitted for approval.

9/7/55 Fin may see after issue

Kew 9-7-55 M 11.7.55 Fin

P.W.D. no. 56394 A/55

11.7.55

Fin (A/B)

ADDITIONAL DEPUTY SECRETARY TO GOVT. 4726 11 JUL 1955 Finance DEPARTMENT

The draft letter above may be issued

2 12.7.55

Fin. U.O. 54726/EBBS 13-7-55.

5925

ASST. SECRETARY TO GOVERNMENT 13 JUL 1955 PUBLIC WORKS DEPARTMENT

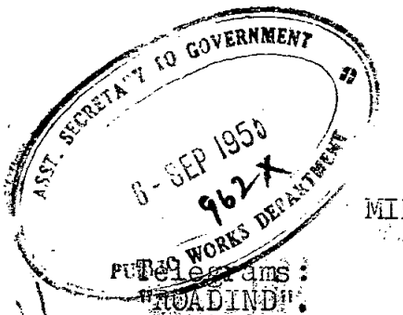
P.W.D (A3)

May issue.

13/7/55 M 14.7.55 14/7/55

Kew 13-7-55

5



GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT : ROADS WING

Telegrams:
"ROADIND".

JAMNAGAR HOUSE
Shahjehan Road

NO.WIV-3(39)/55, New Delhi-2, the
6 SEP 1955

From

Shri Harbans Singh,
Under Secretary to the Government of India.

To

The Secretary to the Govt.of Madras,
Public Works Department, Madras.

Subject: Widening and upgrading miles 77/1 to 82/2 of the Mangalore-Baindur Section of the West Coast Road. (Job No.OC/MD/955).

Sir,

With reference to your letter No.56394-A/55-2, dated the 14th July 1955, I am directed to enclose a technical note by the Consulting Engineer(Road Development) on the estimate for the work mentioned above. As stated therein, the provision for land acquisition included in the estimate for the work in question has been deleted as the standards to be adopted for land width along the West Coast Road in Madras State are still under consideration. The final decision reached in the matter will be communicated to the State Government in due course. An estimate for land acquisition may be prepared and submitted to this Ministry for obtaining the technical approval and financial sanction of the Government of India when the decision referred to above has been reached. By deleting the provision for land acquisition as well as by modifying the specifications for the metalled shoulders the estimate has been modified to Rs 59,700/- as shown in the copy returned herewith.

2. I am to convey the technical approval and financial sanction of the President to the modified estimate amounting to Rs 59,700/- (Rupees fifty nine thousand and seven hundred) only for the work mentioned above. No agency charges are admissible in respect of this work.

3. The expenditure on the work is debitable to the sub-head "Construction of Other Roads" subordinate to the major head "81-Capital Account of Civil Works Outside the Revenue Account"

f or .....

for which the Demand number for the current financial year is "134-Capital Outlay on Roads". Audit are being informed accordingly. I am to request that the amount required for expenditure on the work during the current financial year may be intimated to this Ministry at an early date.

4. The work has been assigned Job No.8C/MD/955. This Job No. may kindly be quoted in all future correspondence regarding the work.

5. I am to request that arrangements may be made for the submission of monthly progress reports on the work in the prescribed form to the Consulting Engineer(Road Development) direct by the Executive Engineer concerned. A completion report on the work may also be furnished to the Government of India in due course.

Yours faithfully,

(Harbans Singh),
Under Secretary to the Govt.of India.

Encl:Technical note.
2.Modified estimate.

Copy forwarded to the Accountant General, Madras.

By order etc.,

(Harbans Singh),
Under Secretary to the Govt.of India.

Encl:Nil.

Copy, with a copy of the technical note, forwarded for information to the Chief Engineer(Highways), Madras with reference to his endorsement No.11598-J2/55-4, dated the Ist July 1955.

(D.G.Bhagat),
Planning Officer,
for Consulting Engineer(Road Development).

Encl:Technical note.

"N.SINGH"
30/8/55.

7

GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT
(ROADS WING)

NO.WIV-3(39)55. New Delhi-2, the 2 SEP 1955

TECHNICAL NOTE

Widening and Upgrading Mangalore-Baindur Section (M.77/1 to M.82/2 of the West Coast Road).

State: Madras. Length: 5 M. 1 F.

Estimated cost
(Original):- Rs 68,700/-/-

(Modified):- Rs 59,700/-/-

Reference: Letter No.56394 A/55-2, dated the 14th July 1955, from Public Works Department, Madras.

COMMENTS.

1. Land Acquisition.

The standards to be adopted in respect of land to be acquired for the West Coast Road are still under examination and final decision in this connection will be intimated later. The provision for land acquisition has in the meantime been deleted from the estimate and a separate estimate for this item may be prepared and sent in due course.

2. Alignment.

The 'S' curve in M.82 at the crossing of Sankodajundi Hole should be flattened and the alignment so fixed as to suit the site finally adopted for the bridge. A detailed plan showing the alignment here may be sent for information. If, however, the site of the bridge has not yet been finalised, it is suggested that the work of upgrading and blacktopping should be left out in a length of about half a mile on either side of the crossing and taken up only after the site for the bridge is fixed.

The alignment between Mile 78/4 and 77/0 has series of awkward bends and should be straightened as shown in red if the conditions at site permit. Where deviations are found feasible, no work should please be done on the existing sections which will have to be abandoned. All work will need be done on the deviations. Alignment plans of the deviations finally adopted may please be sent for record.

(P.T.O.)

3. Metalled shoulders.

The shoulders may be done in 4 in. thickness.

The estimate has been modified in light of the remarks 1 and 3 above and it now amounts to Rs 59,700/-/-.

(D.G.Bhagat),
Planning Officer,
for Consulting Engineer(Road Developm

ENC:NIL.

"N.SINGH"
30/8/55.

(C.E. 56374 A/55)

9

P. (A-3)

SUB: COMMUNICATIONS - West Coast Road Development Programme -Widening and Upgrading miles 77/1 to 82/2 of Mangalore Baindur Section in South Kanara Division (Job No.OC/AD 955) - Estimate for Rs 59,700/- Sanctioned.

Ref: From the C.E(H) Ref.No.11598 J2/55- dated 1-7-55
From the Govt. of India, Ministry o Transport (R.W) letter No.WIV-3(3 55 dated 2-9-55

G.O.MS.NO. 3570 dt 16-9-55

In their letter second cited, copy also endorsed to the C.E(H) and the A.G. Madras, the Govt. of India have accorded their technical approval and financial sanction to an estimate for Rs 59,700/- (Rupees fifty nine thousand and seven hundred only) for the work of widening upgrading the stretch from miles 77/1 t 82/2 of the Mangalore Baindur Section c the West Coast Road in South Kanara Dt.

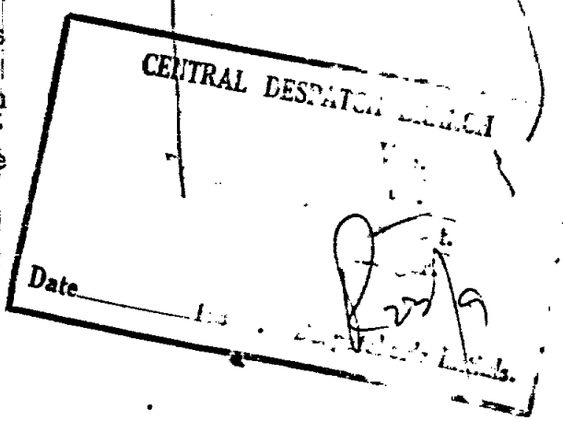
2. The expenditure is debitable t "50.h.Civil works - Development Schemes I.Schemes included in the Five Year Pla (ii) Communications - Highways Deptt. E State Highways". The amount recovered from the Govt. of India should be credi under "XXXIX Civil Works - c.Recoveries of expenditure - Receipt of Highways Deptt.".

3.. The estimate sanctioned by the Govt. of India is forwarded to the C.E(H). He is requested to report at or the allotment required for the work during the current year for intimatin Govt. of India.

4. The C.E(H) is requested to arrange for the submission of monthly Progress reports on the work in the prescribed form to the Consulting Engineer (R.D) direct by the D.E(H) concerned. He is also requested to furnish a completion report on the work to the Govt. in due course.

14.9.55

13/9/55
13.9.55



To
The C.E(H) with the estimate at (S)
The A.G. thro' Fin.
Duplicate copy to A.G. by na

3 S/cs(with copy of pp.5 cf.)

NOTE

There is a provision of Rs 22,000/- in the C.W. Budget for 1955-56 for the work under reference. Hence there is no need to circulate the case to the Ministers. The draft order above is for approval-Finance may see before issue.

13/9/55
13.9.55

14.9.55 Fin (S.B)

The draft order above may be issued

P.W.D No. 56394 A/55
14.9.55

15.9.55

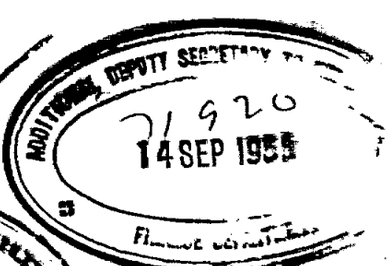
15/9/55

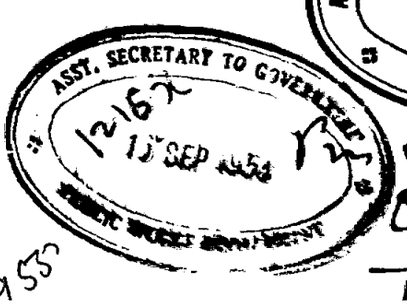
P.W.D(A3)

May issue.

16/9/55
16.9.55

16.9.55





No. 71920
CB-1

17367

From
Sri.A.M.Frederick,B.A.,B.E.,M.I.E.,
I.S.E., Chief Engineer,P.W.D(General)
Additional Charge of the post of
Chief Engineer(Highways)
Chepauk, Madras-5.

To
The Secretary to Government,
Public Works Department,
Madras

ASST. SECRETARY TO GOVERNMENT
3-OCT 1955
PUBLIC WORKS DEPARTMENT

Letter No.11598-J2/55-7 dated 29-9-55.

Sir,

Sub: widening and upgrading M.77/1 to 82/2 of Mangalore Baindoor coast road OC.MD.955.

Ref: G.O.Ms.No.3570 dated 16-9-55.

I invite attention to my letter No.28038-J2/55-6 dated 27-7-55 wherein a provision of Rs.15000/- was requested for the above work.

But Government of India have not allotted any funds for the work while sanctioning allotment of funds for original works on WestCoast road vide their letter No.B(21)12/55 dated 23-9-55. I request that they may be addressed to allot Rs.15000/- for expenditure on this work during the current year.

for Chief Engineer(Highways)

Jap/29-9

13

P.W.D.(A.2)

Letter No. 1736X-A/55-1 dated 17.10.55

CENTRAL DESPATCH BRANCH
Van.
Post.
Date 19/10
Initials
Date

To

The Secretary to the Govt. of India,
Ministry of Transport(Roads Wing
Jamnagar House, ShahjehanRo
New Delhi.

Sir,

Sub:- Communs.- Roads- West Coast Road- Widening and upgradin M 77/1 to 82/2 of Mangalore Bindur Section of West Coas Road.(Job No.OC/MD/955.)

Ref:- Shri HarbansSingh's letters
1. No.WIV-3(39)/55 d/-2-9-1955
2. No.B-21(12)55 d/- 23-9-195

I am directed to state that in their letter No.B1-21(12)/55 dated 23-9-1955 the Govt. of India have not made any allotment for meeting expre. during the current financial year on Job No.OC/MD/955. The C.E.(H) of this State has reported that a su of Rs.15,000/-(Rupees fifteen thousand only) will be required towar expre on this work during the current year. I am now to request that orde of the Govt. of India sanctioning thi further amount may be obtained and communicated to this Govt. at an earl date.

Yours faithfu
17.10.55

(V)/MP5-6-56
(S)/53-57-56

(S)/MP53-5-56
(Com 376 30 Pw / 30.9.55)

P 146

DEPUTY SECRETARY TO GOVERNMENT
P 3422
21 OCT 1955
E.B
FINANCE DEPARTMENT

19/10

KPG
Kun
14-1055

Copy to the C.E.(H)

Note:- Finance may see after issue of the draft.
17.10.55

1736X-A/55-2
20.10.55

4 A 14

Finance(EB)

The letters on page 3 above may be perused.

KT
2-11-55

2
3-11-55

A
3/11/55

P.W.

PWD(A3)

The orders of the Govt of India may be awaited till 20.11.55.

M
7.11.55

Sm: 83422-EB1
4-11-55

ASST. SECRETARY TO GOVERNMENT
2578
4 NOV 1955
PUBLIC WORKS DEPARTMENT

RM
6/11/55

Pde
7.11.55

15

P.W.D(A3)

Letter No. 1736X-A/55-3 dt 24.11.55

To

The Secretary to the Govt. of India,
Ministry of Transport (R.W),
Jamnagar House, Shahjahan Road
New Delhi

Sir,

Sub: West coast Road - Widening and upgrading M.77/1 to 82/2 of Mangalore - Baindur section of West coast Road [Job No OC/MD/955].

Ref: This Govt's Letter No 1736 X-A/55-1 dt 17.10.55

I am directed to invite

CENTRAL DESPATCH BRANCH
Van.
Dem...
Date _____ 195 . Despatcher's Initials.
R.N. 24/11/55

p3cf

16

reference to the letter cited and to enquire when the orders of the Govt of India on the matter may be expected.

RCI 24/11/55

KLW 24-11-55

MJ 24.11.55

Y.F.

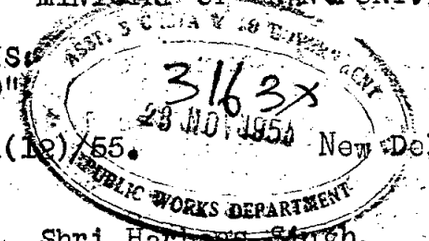
copy to

DTA P.N.V 24/11/55

The CE (H)

17

GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT: ROADS WING



TELEGRAMS: "ROADIND"

JAMNAGAR HOUSE: SHAHJEHAN ROAD.

No. B-21(12)/55. New Delhi-2, the 25 NOV 1955

From

Shri Harbans Singh,
Under Secretary to the Government of India.

To

The Secretary to the Government of Madras,
Public Works Department, MADRAS.

Subject:- Allotment of funds for sanctioned original works on the West Coast Road during 1955-56.

Sir,

With reference to your letter No. Lr. No. 1736 XA/55-1, dated the 17th October 1955, I am directed to say that the President is pleased to place at your disposal a further allotment of Rs. 15,000/- (Rupees fifteen thousand) only for covering expenditure during 1955-56 on the work "widening and upgrading miles 77/1 to 82/2 of the Mangalore-Baindur Section of the West Coast Road - Job No. OC/MD/1955".

2. An allotment of Rs. 19,02,500/- was placed at your disposal in this Ministry's letter of even number dated the 23rd September 1955. With the further allotment now sanctioned, the total allotment placed at the disposal of the State Government for covering expenditure during 1955-56 on sanctioned original works on the West Coast Road in the State amounts to Rs. 19,17,500/-.

3. The expenditure is debitable to the sub-head 'Construction of other Roads' subordinate to the major head '81-Capital Account of Civil Works outside the Revenue Account' for which the corresponding Demand number for the current financial year is "134-Capital Outlay on Roads.

Yours faithfully,

Harbans Singh
(HARBANS SINGH)
Under Secretary to the Government of India.

Encl: NIL.

A.K.S.
23.11.55.

Copy

Copy, (with three spare copies) forwarded to the Ministry of Finance (Communications Division) for communication to the Accountant General, Madras. This letter has been issued with the concurrence of that Ministry vide their U.O. No. 9010-CIV/55, dated the 18th November 1955.

By order etc.

Sd/- (HARBANS SINGH)
Under Secretary to the Government of India.

Encl: Three spare copies of the letter.

Copy forwarded to the Chief Engineer (Highways) Madras, Public Works Department, Madras.

Sd/- (HARBANS SINGH)
for Consulting Engineer (Road Development)

Encl: NIL.

A.K.S.

23.11.55.

* 24 *

GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT: ROADS WING.

Telegrams
"ROADIND"

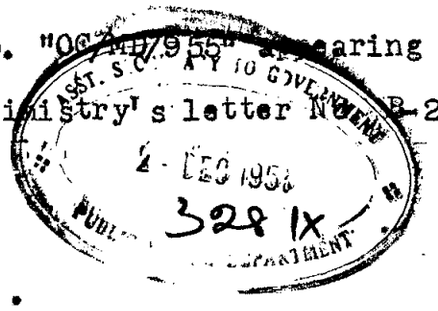
Jamnagar House
Shahjehan Road

No. B-21(12)55

New Delhi-2
-1 DEC 55

CORRIGENDUM

Please substitue the Job No. "OC/MD/1955" by the Job No. "OC/MD/955" appearing in last line of para 1 of this Ministry's letter No. B-21(12)55 dated the 25th November 1955.



1/12/55

(D.P.Ohri)
for Under Secretary to the Government of India

To

The Secretary to the Government of Madras,
Public Works Department,
Madras.

P.W.D (A-7

21

Memo No. 1736 XA/55-5 dt 27-12-55

Sub:- Allotment of funds for sanctioned original works on the West coast Road during 1955 56- Additional allotment of Rs. 15,000/- for work of widening and upgrading miles 77/1 to 82/2 of Mangalore-Bainduer section of west coast Road - [Job No 04 ND/955] sanctioned.

Read: GOMS No. 3763 PW dt 30.9.55 From the CE(H), Ref No 11598 J2/55-7 dt 29.9.55

From the Govt of India, Ministry of Transport (R.W), Letter No B-21 (12)/55 dt 25-11-55 & NO B-21(12)/55 dt 1-12-55

In their letter dt 25.11.55 third cited, copy endorsed to the CE(H) and the A.G. Madras, the Govt of India have sanctioned a further allotment of Rs. 15,000/- (Rupees fifteen thousand only) for covering expenditure during 1955-56 on the work of widening and upgrading miles 77/1 to 82/2 of the Mangalore-Bainduer section of the west coast Road in South Kanara Dn:- The C.E.(H) is requested to see that the amount sanctioned by the Govt

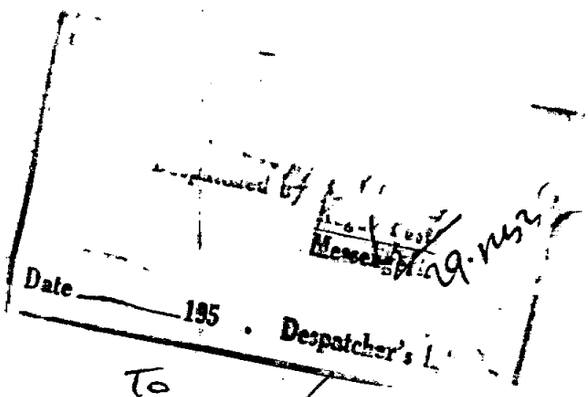
22

of India for the current year is spent ~~in full~~ during the current year itself without any lapse.

M 13.12.55

RL 12/12/55

KNV 12.12.55



To

The C.E. (4)
The AG. (Hyd' Finance)
Duplicate copy to
The A.G. (by name)
3 S/c.

note: Please see the letters from the Govt of India on pp 7-9 of the draft Memo above is submitted for approval. Finance may see before issue.

M 13.12.55 Fin

RL 12/12/55

KNV 12.12.55

P.W.D. U.O. 1736x A/55-4

13.12.55

Finance (EB)

(Previously seen in Finance on p 4 C/P)

The draft memo on 1-2 above may be passed.

22-12-55 M 22.12.55

23/12/55 P.W.

ADDITIONAL DEPUTY SECRETARY
EB 13 DEC 1955
109167

Fin. U.O. 109167/55-1

55-1 / 26-12-55

P.W.D. (A3)

The draft memo at pp. 1-2 ante may now be issued.

M 27.12.55

CM 26/12/55 KNV 27.12.55

ASST. SECRETARY TO GOVT
3880X
26 DEC 1955
PUBLIC WORKS DEPARTMENT

GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT: ROADS WING

Telegrams
"ROADIND"

Jamnagar House
Shahjehan Road.

NO. WIII-119(31)/55

New Delhi-2, the 2

From

Shri Harbans Singh,
Under Secretary to the Government of India.

To

The Secretary to the Government of Madras,
Public Works Department, Madras.

Subject:- Widening & upgrading miles 77/1 to 82/2 of Mangalore-Baindur section of W.C.Road. (Job No. OC/ M D/955.)

Sir,

I am directed to refer to your letter No.1736 X-A/5523, dated the 24th November 1955, on the subject mentioned above and to request that a copy of the state Government's letter No. 1736-X-A/55-1, dated the 17th October 1955 referred to therein may be supplied to this Ministry as the original does not seem to have been received here.

Yours faithfully,

Harbans Singh

Under Secretary to the Government of India.

Encl: Nil

"Mehta"
28.XII.55

Fd ... of (V)

PWD(A3)

Letter No 4024-A/55-1 dt. 17-1-56.

To

The Secretary to the Govt of India,
Ministry of Transport, (R.W)
Jamnagar House,
Shahjahan Road,
New Delhi

Sir

Sub:- Commns. Roads-
Widening and upgrading
Miles 77/1 to 82/2 of
Mangalore-Bhatkal
Section of West-Coast
Road (Job No. 06/MD/1955)

Ref:- Shri Harbans Singh's
letter No W III -119(31)55
dt nil (Dec. 1955)

I am directed to state that a reply to this Govt's letter No 1736-A/55-1 dt. 17-10-55 has already been received from Ministry of Transport (R.W) Letter No RD-21(12)/55 dt 25.11.55. I am however, to send herewith a copy of this Govt's letter No 1736-A/55-1 dt 17-10-1955 as desired in the letter cited.

Yours faithfully,
16.1.56.

Encl

Copy of letter at BRANCH
P 13 c6 of (V)
Date ——— 195

P1 c6

(W) P13c6

(V) P17 c6

(V) P13 —— 1
P1 c6 ——

Kurs
16-1-56

West Coast Road Scheme
Widening and upgrading Mangalore
Baindur coast Road upto district
limits Miles 77/1 to 82/2
Item no. 56
Estimate amount Rs.68,700

Specification report to accompany the estimate for widening and upgrading Mangalore Baindur Coast Road upto District limit Mile 77/1 to 82/2.

Estimate Rs.68,700/-.

Authority: This work pertains to item No.56 in the list of works approved by the Government of India in their letter No. WIV-3(15)53 dated 22.1.54 for the development of the West Coast Road.

Necessity: The road proposed to be upgraded is a part of the West Coast road connecting Bombay to Cape Comorin. The existing road from Baindur to District limit is narrow and the present road width is only 16 to 18'. It is now proposed to widen the road to have a formation width of 32'-0".

Climate: The West Coast has an average rainfall of 130" to 150". Rainfall is during the months of June to October and becomes lighter in other months. The temperature ranges from 98° to 103°. In general the climate is humid.

Alignment. The present alignment will be followed for the entire length of the road. The alignment passes through important villages which have no transport facilities at present.

Traffic: Though the traffic intensity is less than 1000 tons on this road, it will definitely increase as soon as all the bridges are built up and the road surface black-topped and improved upto the District limit.

Longitudinal section and cross Section.

Longitudinal and cross sections are appended. Side slopes of 1½" : 1" in embankment and ½ to 1 in cutting have been proposed as the soil at site is either hard gravel or laterite.

Formation width and other provisions.

The formation width proposed is 32'-0" to conform to National Highway standards. The road has ups and downs and where it is steeper than 1 in 15 regrading is to be done, and has been proposed. Flatter gradients than 1 in 20 are not proposed as it will involve heavy cutting in hard gravel or laterite rock and the cost will be prohibitive. Provision has also been made for soling with laterite metal where the road is regraded. No provision for collection of laterite metal for resoling the regraded portion has been provided for in the estimate as it will become available when the regrading the road and can be utilised for the purpose.

Laterite shoulders 3'-0" x 0'-6" to support the carriageway laterally have also been provided for.

Bridges and culverts: Item No.82 in the approved list of works pertains to strengthening and widening the culverts on this stretch of road. The same will be sent separately.

Road Land: It is proposed to acquire lands on either side so that the width of land may be from 66' to 100' to effect the minimum widening of the road to 32'-0" width. The lands on both sides of the road are mostly wet lands.

Materials and Labour: Those are available locally in adequate measure.

Transport: Transport will be by road and cart track.

Rates: Standard schedule of rates for the year 1954-55 have been adopted.

Tools and Plants: Special tools and plant are available to this Department for the use on the work.

Execution & Agency: Experienced contractors are available and the work can be got executed through contract agencies.

General: The work will be carried out as per M.D.S.S.

K.K.Nambiar,
Chief Engineer (Highways)

/true copy/

17-2-55
Technical Assistant to the
Chief Engineer (Highways).

CK
30/6/55

Sr
15/6

Widening and upgrading Mangalore Baindur Coast Road 77/1 to 82/2.

Abstract Estimate.

Quantity.	Description of work.	Item No. in the schedule of rates.	Rate.	Per	Total	Amount
1.	2.	3.	4.	5.	6.	7.
I.	Earthwork excavation in hard gravelling soil and depositing on bank for widening the road within initial lead and lift.					
1167000 Cft.	As per calculation sheet attached.	15A	22-15-0	1000 Cft	26768-0-0	
II.	Earthwork excavation in hard laterite soil and depositing on Bank for widening the road within initial lead and lift.					
257000 Cft.	As per calculation sheet attached.	17B	33-14-0	"	8706-0-0	
III.	Provision for extra lift and lead.	Double of 5119				
1000 Units.			2- 4-0	"	2250-0-0	
IV.	Cleaning all jungles uprooting and removing ~~stumps~~ stumps for road side.	Data				
467100 Sq.ft.	As per calculation sheet.		0-10-9	100 Sq.	3132-0-0	
V.	Collection and supply of hard laterite metal 1½" to 3" size from approved quarries including conveyance and stacking on					
13860 Cft.	77/2-8		12-11-0	100 Cft.	1759-0-0	
15840 "	78/1-8		12-11-0	"	2010-0-0	
15840 "	79/1-8		12-11-0	"	2010-0-0	
15840 "	80/1-8		12-11-0	"	2010-0-0	
15840 "	81/1-8		12-11-0	"	2010-0-0	
4182 "	82/1-8		15- 0-6	"	629-0-0	
VI.	Spreading laterite metal and hand packing to proper camber 6" thick watering and consolidation with hard roller including all leads for water complete.					
162900 Sq.ft.			1- 5-6	"	2189-0-0	
VII.	Resoling with laterite metal 2" to 3" size for the regraded part work					
28000 Cft.			18- 5-0	"	5130-0-0	

1.	2.	3.	4.	5.	6.	7.
VIII.	Supply of mile stones.					
a.	5 Nos. (5'0" x 1'6" x 0'6")	29	20-0-0	each	100-0-0	
b.	Supply of furlong stones. 36 Nos.(2'-9" x 0'9" x 0'4")	30	3-12-0	"	135-0-0	
c.	Cost of acquisition of road land (statement enclosed)				5000-0-0	
d.	Cost of boundary stones (50 stones per mile) 250 Nos.	31	4- 0-0		1000-0-0	
	Supply of sign posts and guide posts etc.		L.S.		500-0-0	
IX.	Contingencies 3%				2049-0-0	
X.	Petty Supervision 2%				1307-0-0	
				Rs.	68700-0-0	

(Rupees sixty eight thousand and seven hundred only)

K.K.Nambiar,
Chief Engineer (Highways)

/true copy/

Technical Assistant to the
Chief Engineer (Highways).

Widening and upgrading Mangalore Baindur Coast Road 77/1 to 82/2.

Detailed Estimate.

Details of Work.	Number.	MEASUREMENT IN FEET Length.	Breadth.	Depth	Area or contents	Total qty. of each discription of work.
1.	2.	3.	4.	5.	6.	7.
I. Earthwork excavation in hard gravelly soil and depositing on bank for widening ~~of~~ 06 the road within initial lead and lift.						
As per sub estimate						11,67,000 Cft.
II. Earthwork excavation in hard laterite soil and depositing on bank for widening the road within initial lead and lift.						
As per calculation sheet.						2,57,000 Cft.
III. Provision for extra lift and lead.						1,000 units.
IV. Cleaning all jungles uprooting and removing stumps from road sides.						
As per Calculation sheet.						4,67,100 sq.ft.
V. Collection and supply of hard laterite metal 1½" to 3" ~~thick~~ size from approved quarries including conveyance and stacking on road side.						
77/2-8	2 x 7	660-0	3-0	0-6	13860 Cft	
78/1-8	2 x 8	660-0	3-0	0-6	15840 Cft	
79/1-8	2 x 8	660-0	3-0	0-6	15840 Cft	
80/1-8	2 x 8	660-0	3-0	0-6	15840 Cft	
81/1-8	2 x 8	660-0	3-0	0-6	15840 Cft	
82/1	2 x 1	660-0	3-0	0-6	1980 Cft	
82/2	2 x 1	734-0	3-0	0-6	2202 Cft.	
VI. Spreading laterite metal and hard packing to proper camber 6" thick watering and consolidation with hard roller including all leads for water complete.						
77/2-8	2 x 7	660-0	3-0	-	27720 Sq.ft.	
78/1-8	2 x 8	660-0	3-0	-	31680 Sq.ft.	
79/1-8	2 x 8	660-0	3-0	-	31680 Sq.ft.	
80/1-8	2 x 8	660-0	3-0	-	31680 Sq.ft.	162904
81/1-8	2 x 8	660-0	3-0	-	31680 Sq.ft.	
82/2	2 x 1	660-0	3-0	-	3960 Sq.ft.	
82/2	2 x 1	734-0	3-0	-	4404 Sq.ft.	

1.	2.	3.	4.	5.	6.	7.
VII. Provision for resoling wherever necessary when the road is upgraded						
Resoling with laterite metal 2" to 3" size for the regraded portion						
77/1-200 to 77/2-310	1	770-0	13-0	0-6"	5005 Cft	
77/7 to 78/0 only 400'	1	400-0	13-0	0-6"	2600 Cft	27920 or 28000 Cft.
78/0-200 to 78/3-400	1	2180-0	13-0	0-6"	14170 Cft	
Mile 81/0-81/0-400	1	330-0	13-0	0-6"	2145 Cft	
For curves	10	200-0	4-0	0-6"	4000 Cft	
VIII. Supply of mile stones. a. (5'-0" x 1½" x ½")				5 Nos.		
b. (Supply of furlong stones. (2 3/4" x 3/4" x 0'-4")				36 Nos.		
c. Cost of acquisition of road land.						
d. Cost of boundry stones. (about 50 stones per mile)				5 x 50 = 250 Nos.		
e. Supply of sign post and guide post etc.						
XX. Contingencies 3%.						
X. Petty Supervision charges				2%		
Cleaning half light jungle and half heavy jungle including cutting all trees and upgrooting.						
77/1-330 to 77/2	1	330-0	30-0	--	9900	
77/2-77/3	1	660-0	30-0	--	19800	
77/3 to 78/4	9	660-0	15-0	--	89100	
78/4 to 78/5	1	660-0	30-0	--	19800	
78/5 - 78/5-330	1	330-0	30-0	--	9900	
78/7 to 79/1	2	660-0	30-0	--	39600	
79/1 to 79/4	4	660-0	10-0	--	19800	
79/5,6,7	No clearance.					
79/7-330 to 80-0-0	1	330-0	5-0	--	1650	
80/2,3,4	3	660-0	5-0	--	9900	
80/1	No clearance.					
80/5,6	2	660-0	30-0	--	39600	
80/8	1	500-0	30-0	--	15000	
81/- to 81/6	6	660-0	30-0	--	118800	
Less wet land	1	330-0	15-0	--	4950	
81/6 to 82/2	4	660-0	30-0	--	79200	
					467100.	

Area Calculation.

Mile.	Area. Cutting.	Area. Filling.	End Area Cutting.	End Area Filling.	Mean Area Cutting	Mean Area Filling.	Length.	Cubical Contents. Cutting	Cubical Contents. Filling.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
77-1-330	222	-	222						
77-2-0	285			-	253½	-	330	83655	-
77-2-330			2	8	144½	4	330	47355	1320
77-3-0	2	8	3	11	2½	9½	330	825	3135
77-3-330	3	11	0	42	1½	26½	330	495	8745
77-4-0		42	16	0	8	21	330	2640	6930
77-4-330	16	0	0	28	8	14	330	2640	4620
77-5-0		28	-	100		64	330		21120
77-5-330		100	-	40		70	330		23100
77-6-0		40	-	24		32	330		10560
77-6-339		24	3	15	1½	19½	330	495	6435
77-7-0	3	15	1	34	2	24½	330	660	8085
77-7-339	1	34	70	-	35½	17	330	11715	5610
8-0-0	70		60	-	65		330	21450	
8-0-215	60				30		215	6450	
78-0-339			64		32		115	3680	
78-1-0	64	-	80	52	72	26	330	23760	8580
78-1-400	80	132	-	640	40	346	400	16000	138400
78-2-0	-	640	-	252	-	446	260	-	115960
78-2-330	-	252	-	300	-	276	330	-	91080
78-3-0		300	-	600	-	850	330		148500
78-3-330		600	-	160	-	380	330	-	125400
78-3-400		160	-			80	70	-	5600
78-4-0			16	-	8	-	260	2080	-
78-4-330	16		-	64	8	32	330	2640	10560
78-5-0	-	64	-	24	-	44	330	-	14520
78-5-330	-	24	-	24	-	24	330	-	7920
78-6-0	-	24	-	32	-	28	330	-	9240
78-6-330	-	32	-	36	-	34	330	-	11220

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
78-7-560	1	16		60		38			8740
79-0-230	-	60	1	12		36	330		11880
79-0-560	-	12	-	20		16	330		5280
79-1-230	-	20	-	4		12	330		3960
79-1-560	-	4		10		7	330		2310
79-2-330	-	10	~~60~~ 60		30	5	430	12900	2150
79-3-0	60	-	~~20~~ 20		40		330	13200	-
79-3-330	20			24	10	12	330	3300	3960
79-4-0	-	24		20	22	22	330	-	7260
79-4-330	-	20		4		12	330	-	3960
79-5-0	-	4	8		4	2	330	1320	660
79-5-330	8			40	4	20	330	1320	6600
79-6-0	-	40	6	-	3	20	330	~~1320~~ 990	6600
79-6-330	6	-		16	3	8	330	990	2640
79-7-0	-	16		64		40	330	-	13200
79-7-330	-	64		4		34	330	-	11220
80-0-0	-	4		28		16	330	-	5280
80-0-330	-	28		8		18	330	-	5940
80-1-0	-	8		16		12	330	-	3960
80-1-330	-	16	2	8	1	12	330	330	3960
80-2-0	2	8	4	24	3	16	330	990	5280
80-2-330	4	24	24		14	12	330	4620	3960
80-3-0	24	-		24	12	12	330	3960	3960
80-3-330	-	24	4	16	2	20	330	660	6600
80-4-0	4	16		16	2	16	330	660	5280
80-4-330	-	16		24		20	330	-	6600
80-5-0	-	24		68		46	330	-	15180
80-5-330	-	68		12		40	330	-	13200
80-6-0	-	12		42		27	330	-	8910
80-6-330	-	42	6		3	21	330	990	6930

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
80-6-500	6	-		44	3	22	170	510	3740
80-7-0	-	44		108	-	76	160		12160
80-7-400	-	108		40		74	400		29600
81-0-0	-	40	4	2	2	21	260	520	5460
81-0-200	4	2	88		46	1	200	9200	200
81-0-330	88	-	4	8	46	4	130	5980	520
81-1-0	4	8		12	2	10	330	660	3300
81-1-330	-	12		52	-	32	330		10560
81-2-0	-	52	32		16	26	330	5280	8580
81-2-330	32	-		4	16	2	330	5280	660
81-3-0	-	4		24	-	14	330		4620
81-3-330	-	24		16	-	20	330		6600
81-4-0	-	16		8	-	12	330		3960
81-4-330	-	8	4	12	2	10	330	660	3300
81-5-0	4	12	16		10	6	330	3300	1980
81-5-330	16	-	4	4	10	2	330	3300	660
81-6-0	4	4		52	2	28	330	660	9240
81-6-330		52		12	-	32	330		10560
81-7-0	-	12		24	-	18	330		5940
81-7-330	-	24	-	6	-	15	330		4950
82-0-0	-	6	2	4	1	5	330	330	1650
82-0-330	2	4		24	1	14	330	330	4620
82-1-0	-	24	6	6	3	15	330	990	4950
82-1-330	6	6	48		27	3	330	8910	990
82-2-74	48	-		32	24	16	404	9696	6464

/true copy/

12/6

Detailed Estimate.

District: Taluk

Name of work: 'Widening and Upgrading Mangalore Baindur Coast Road upto District Limit M 75/5 to 82/2.

Estimate Amount Rs.

S.No.	Description of work.	Hard Gravel		Laterite.	
		Cutting.	Filling.	Cutting.	Filling
1.	2.	3.		4.	
I.	Earthwork excavating and depositing on bank for road widening within initial lead and lift in mile.				
	77-1-330' to 77-2-0 Laterite rock.			83665	
	72-2-0 to 77-2-330' Laterite rock			47355	1320
	77-3-0 (Laterite Rock)			825	3135 ~~1320~~
	77-3-0 to 77-3-330 (Hard Gravel)	495	8745		
	77-4-0 to 77-4-330' (Hard Gravel)	2640	4620 ~~6930~~		
	77-4-330 to 77-5-0 (Hard Gravel)	~~2640~~	21120 ~~16620~~		
	77-5-0 to 77-5-330 (Hard Gravel)		23100 ~~21120~~		
	77-5-330 to 77-6-0 (Hard Gravel)		10560		
	77-6-~~330~~ 8 (Hard Gravel)				
	77-6-330 (Hard Gravel)	495	6435		
	77-6-330 to 77-7-0 (Hard Gravel)	660	8085		
	77-7-330 to 78-0-0 (Hard Gravel)	21450 ~~11715~~	~~5610~~		
	78-0-0 to 78-0-215 (Hard Gravel)	6450			
	78-0-215 to 78-0-330	3680			
	78-0-330 to 78-1-0	23760	8580		
	78-1-0 to 78-1-400	16000	138400		
	78-1-400 to 78-2-0	164400	115960		
	77-3-330 to 77-4-0 (Hard Gravel)	2640	6930		
	77-7-0 to 77-~~7~~8330 (Hard gravel)	11715	5610		

1.	2.	3.	4.
I.(Continued)			
78-2-330 ½ Hard laterite ½ Hard gravel		45540	45540
78-2-330 to 78-3-0 ½ Hard laterite. ½ Hard Gravel.		74250	74250
78-3-0 to 78-3-330 Hard Gravel		125400	
78-3-330 to 78-3-400 Hard Gravel.		5600	
78-3-400 to 78-4-0 Hard gravel.	2080		
78-4-0 to 78-4-330 Hard gravel	2640	10560	
78-4-330 to 78-5-0 Hard Gravel		14520	
78-5-0 to 78-5-330 Hard Gravel		7920	
78-5-330 to 78-6-0 Hard Gravel		9240	
78-6-0 to 78-6-330 Hard Gravel		11220	
78-6-330 to 78-7-0 Hard Gravel		15180	
78-7-0 to 78-7-330 Hard Gravel		11880	
78-7-330 to 78-7-560 Hard Gravel		8740	
78-7-560 to 79-0-230 Hard Gravel		11880	
79-0-230 to 79-0-560 Hard Gravel		5280	
79-0-560 to 79-1-230 Hard Gravel		3960	
79-1-230 to 79-1-560 Hard gravel		2310	
79-1-560 to 79-2-330 Hard gravel	12900	2150	
79-2-330 to 79-3-0 Hard Gravel	13200		
79-3-0 to 79-3-330 Hard Gravel	3300	3960	

1.	2.	3.	4.
I.(Continued)			
79-3-330 to 79-4-0 Hard Gravel.		7260	
79-4-0 to 79-4-330 Hard Gravel.		3960	
79-4-330 to 79-5-0 Hard Gravel	1320	660	
79-5-0 to 79-5-330 Hard Gravel	1320	6600	
79-5-330 to 79-6-0 Hard Gravel	990	6600	
79-6-0 to 79-6-330 Hard Gravel	990	2640	
79-6-330 to 79-7-0 Hard Gravel		13200	
79-7-0 to 79-7-330 Hard Gravel		11220	
79-7-330 to 80-0-0 Hard Gravel		5280	
80-0-0 to 80-0-330 hard Gravel		5940	
80-1-0 to 80-1-330 Hard Gravel	330	3960	
80-1-330 to 80-2-0 Hard Gravel	990	5280	
80-2-0 to 80-2-330 Hard Gravel	4620	3960	
80-2-330 to 80-3-0 Hard Gravel	3960	3960	
80-3-0 to 80-3-330 Hard Gravel	660	6600	
80-3-330 to 80-4-0 Hard Gravel	660	5280	
80-4-0 to 80-4-330 Hard Gravel		6600	
80-4-330 to 80-5-0 Hard Gravel		15180	
80-5-0 to 80-5-330 Hard Gravel		13200	
80-5-330 to 80-6-0 Hard Gravel		8910	
80-6-0 to 80-6-330 Hard Gravel	990	6930	
80-0-330 to 80-1-0 Hard Gravel		3960	

1.	2.	3.	4.
	I. Continued.		
	80-6-330 to 80-7-0 (Hard Gravel)		12160
	80-7-0 to 80-7-400 (Hard Gravel)		29600
	80-7-400 to 81-0-0 Hard Gravel	520	5980
	81-0-0 to 81-0-330 Hard Gravel	9200	200
	82-0-200 to 82-0-330 Hard Gravel	5980	520
	81-0-330 to 81-1-0 Hard Gravel	660	3300
	81-1-0 to 81-1-330 Hard Gravel		10560
	81-1-330 to 81-2-0 Hard Gravel	5280	8580
	81-2-0 to 81-2-330 Hard Gravel	5280	660
	81-2-330 to 81-3-0 Hard Gravel		4620
	81-3-0 to 81-3-330 Hard Gravel		6600
	81-3-330 to 81-4-0 Hard Gravel		3960
	81-4-0 to 81-4-330 Hard Gravel	660	3300
	81-4-330 to 81-5-0 Hard Gravel	3300	1980
	81-5-0 to 81-5-330 Hard Gravel	3300	660
	81-5-330 to 81-6-0 Hard Gravel	660	9240
	81-6-0 to 81-6-330 Hard Gravel		10560
	81-6-330 to 81-7-0 Hard Gravel		5940
	81-7-0 to 81-7-330 Hard Gravel		4950
	81-7-330 to 82-0-0 Hard Gravel	330	1650
	82-0-0 to 82-0-330 Hard Gravel	330	4620
	82-0-330 to 82-1-0 Hard Gravel	990	4950

1.	2.	3.		4.	
I. (Continued)					
82-1-0 to 82-1-330 Hard Gravel		8910	990		
82-1-330 to 82-74 Hard Gravel.		9696	26664		
	Total....:	196541	970179	131845	124245
		= 1166720 cft or 1167000 Cft		= 256090 Cft or 257000 Cft.	

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Data Sheet.

No.	Quantity.	Description of work.	Rate.	Per.	Amount.
I.		Clearing jungle (½ heavy, and half light jungle including cutting and uprooting all trees - 100 sft.			
	½	As per S.I. 1A.	0--3--0	Each	0--1--6
	½	As per S.I. 1B.	0--2--6	Each	0--1--3
		Uprooting and clearing jungle including burning and burying. S.I. 3B.	0--8--0	100 Sft.	0--8--0
			Total Rs....:		0-10--9

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S10/1616

DATA.

2) Collection and supply of hard laterite metal 1½"-3" size from approved quarry including conveyance and stacking on road side.

Mile.	Cost.	Lead.	Quarry.	Total cost or Rate per 100 Cft.
78	8-0-0	0-2 3/4 (4-11-0)	77/3	12-11-0
79	8-0-0	0-2 3/4 (4-11-0)	78/4	12-11-0
80	8-0-0	0-2½ (4-11-0)	79/3 & 5	12-11-0
81	8-0-0	0-4 (4-11-0)	81/0	12-11-0
82	8-0-0	0-4 (4-11-0)	81/0	12-11-0
83	8-0-0	1-0 (7-0-6)	81/0	15- 0-6

3) Spreading laterite metal and hard packing to progress cambers 6" thick watering and consolidation with hand roller including all leads for water complete.

S.I. Item 267		Picking Kanker or laterite surface 2" to 4" deep.	0--3--0
(double the rate for 6") 1.9.0	268	Watering and consolidation laterite metal including spreading laterite 2" to 3" thick and required quantity of gravel when water is available within one furlong.	0-12-0
	268A	Watering and keeping the surface moist	0- 0-7
	265	Rent for tools etc.	0-3- 6
	266	Sundries for ropes etc.	0- 2-6
		Total:	1- 5-7
		or	1- 5-6

Data Sheet.

No.	Quantity.	Description of work	Rate	Per	Amount.
4.		Soling with 3" ~~late~~ to 6" laterite cubes for resoling the regarded portions in one layer.			
	110 Cft.	Stones stacked available at site.			...
	3 Nos.	Men coolies for conveyance and laying	1-8-0	each	4--8--0
	2 Nos.	Women coolies for conveyance.	0-12--0	each	1--8--0
	1 No.	Men cooly for hard packing the ~~so~~ying stones filling up the voids etc.	1--8--0		1--8--0
		Rolling the surface lightly including watering (hand rollers)	L.S.		1--8--0
		Lead for 110 Cft.(average one mile)			9--4--6
					13--4--6 or 18--5--0

Sn 16/6